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10/039,814	10/26/2001	Michael S. Foster	030048036US	9498

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EXAMINER

BENGZON, GREG C

ART UNIT

PAPER NUMBER

2144

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/039,814

Applicant(s)

FOSTER ET AL.

Examiner

Greg Bengzon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 27-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25, 27-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20050621
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

This application has been examined. Claims 1-25, 27-40 are pending. Claims 26 and 41 have been cancelled. Claims 1, 15, 18, and 29 have been amended as per Amendments submitted on 06/21/2005.

### ***Priority***

The effective date of the claims described in this application is April 27, 2001.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-25, 27-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Iwata (US Patent 6108708).

With respect to Claim 1, Iwata discloses a method in a computer system for reconfiguring a path between a source node and a destination node, the method comprising: (Figures 1-4, Figure 6-10, Column 7 Lines 1-35, Column 8 Lines 1-15) establishing a first path between the source node and the destination node, the path

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having a virtual address; (Column 1 Lines 45-65) providing the virtual address to the source node for use in transmitting data from the source node to the destination node via the established path, (Column 6 Lines 50-55, Column 8 Lines 50-65) wherein the virtual address and data are stored in a frame that includes a header and a payload; (Iwata- Column 7 Lines 20-35) and after providing the virtual address to the source node, establishing a second path between the source node and the destination node so that when the source node transmits data using the provided virtual address the data is transmitted via the second path rather than via the first path. (Column 9 Lines 1-5, Lines 40-65, Column 10 Lines 30-40, Column 12 Lines 35-45)

With respect to Claim 2, Iwata discloses the method of claim 1 wherein the establishing of the second path is performed transparently to the source node. (Column 6 Lines 55-65, Column 9 Lines 1-5, Lines 40-65, Column 12 Lines 35-45)

With respect to Claim 3, Iwata discloses the method of claim 1 wherein the path is established through a network of switches. (Column 1 Lines 45-65, Column 6 Lines 30-40)

With respect to Claim 4, Iwata discloses method of claim 1 wherein the path is established through switches with ports and wherein the establishing of a path includes identifying a source-side port and a destination-side port for each switch. (Column 6 Lines 20-50, Column 8 Lines 1-15)

With respect to Claim 5, Iwata discloses the method of claim 4 wherein the establishing of the path includes providing the virtual address to each source-side port of a switch in the path. (Column 8 Lines 1-15, Column 12 Lines 1-15)

With respect to Claim 6, Iwata discloses the method of claim 5 wherein the virtual address of source-side port is used to map the source-side port to the destination-side port of the switch. (Column 10 Lines 30-65)

With respect to Claim 7, Iwata discloses the method of claim 1 including identifying a virtual address for sending data from the source node to the destination node, the identified virtual address being provided to the source node. (Column 6 Lines 50-55, Column 8 Lines 50-65)

With respect to Claim 8, Iwata discloses the method of claim 7 wherein the identified virtual address is not currently used by any source-side ports of the switches.

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(Column 6 Lines 55-65, Column 12 Lines 1-5)

With respect to Claim 9, Iwata discloses the method of claim 7 wherein each port of each switch has a virtual address table for mapping virtual addresses to another port of the switch. (Column 10 Lines 30-65)

With respect to Claim 10, Iwata discloses the method of claim 1 wherein when data is received at a port of a switch, the virtual address of the data is used to retrieve an indication of another port and the data is sent out of the switch through the other port. (Column 10 Lines 30-65)

With respect to Claim 11, Iwata discloses the method of claim 1 wherein the establishing of path from the source node to the destination node includes identifying a source-side port and a destination-side port of each switch in the path. (Column 10 Lines 30-65)

With respect to Claim 12, Iwata discloses the method of claim 1 wherein the data is a Fibre Channel frame. (Column 1 Lines 1-25) The Examiner notes that the Fibre Channel protocol was designed to operate on ATM networks.

With respect to Claim 13, Iwata discloses the method of claim 1 wherein the switches are Fibre Channel compatible. (Column 1 Lines 1-25) The Examiner notes that the Fibre Channel protocol was designed to operate on ATM networks.

With respect to Claim 14, Iwata discloses the method of claim 1 wherein the switches are interconnect fabric modules. (Column 1 Lines 45-55)

With respect to Claim 15, Iwata discloses a computer system for reconfiguring a path between a source node and destination nodes, (Figures 1-4, Figure 6-10, Column 7 Lines 1-35, Column 8 Lines 1-15) comprising: a component that establishes a first path between the source node and a first destination node, the path having a virtual address, (Column 1 Lines 45-65) the first path being identified by a virtual address, so that when the source node transmits data using the virtual address, the data is transmitted via the first path; a component that stores the virtual address and data in a frame that includes a header and a payload; (Iwata- Column 7 Lines 20-35) and a component that, after establishing the first path, (Column 6 Lines 50-55, Column 8 Lines 50-65) establishes a second path between the source node and a second destination node, the second path being identified by the virtual address so that when the source node transmits data using the provided virtual address after the second path is established, the data is transmitted via the second path. (Column 9 Lines 1-5, Lines 40-

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65, Column 10 Lines 30-40)

With respect to Claim 16, Iwata discloses the computer system of claim 15 including: a component that provides the virtual address to a source node for use in transmitting data via the first path before the second path is established and via the second path after the second path is established. (Column 6 Lines 55-65, Column 8 Lines 50-65, Column 12 Lines 35-45)

With respect to Claim 17, Iwata discloses the computer system of claim 15 wherein the establishing of the second path is performed transparently to the source node. (Column 6 Lines 55-65, Column 9 Lines 1-5, Lines 40-65, Column 12 Lines 35-45)

With respect to Claim 18, Iwata discloses the computer system of claim 1 wherein the path is established through a network of switches. (Column 1 Lines 45-65, Column 6 Lines 30-40)



With respect to Claim 19, Iwata discloses the computer system of claim 15 wherein the paths are established through switches with ports and wherein the establishing of a path includes identifying a source-side port and a destination-side port for each switch in the path. (Column 6 Lines 20-50, Column 8 Lines 1-15)

With respect to Claim 20, Iwata discloses the computer system of claim 19 wherein the virtual address is used by source-side ports to map the source-side port to the destination-side port of the switch. (Column 10 Lines 30-65)

With respect to Claim 21, Iwata discloses the computer system of claim 15 including: a component that identifies a virtual address for sending data from the source node to a destination node, the identified virtual address being provided to the source node. (Column 6 Lines 50-55, Column 8 Lines 50-65)

With respect to Claim 22, Iwata discloses the computer system of claim 21 wherein the identified virtual address is not currently used by any source-side ports of the switches. (Column 6 Lines 55-65, Column 12 Lines 1-5)

With respect to Claim 23, Iwata discloses the computer system of claim 21 wherein each port of each switch has a virtual address table for mapping virtual addresses to another port of the switch. (Column 10 Lines 30-65)

With respect to Claim 24, Iwata discloses the computer system of claim 15 wherein when data is received at a port of a switch, the virtual address of the data is used to retrieve an indication of another port and the data is sent out of the switch through the other port. (Column 10 Lines 30-65, Column 11 Lines 1-35)

With respect to Claim 25, Iwata discloses the computer system of claim 15 wherein the data is a Fibre Channel frame. (Column 1 Lines 1-25) The Examiner notes that the Fibre Channel protocol was designed to operate on ATM networks.

With respect to Claim 27, Iwata discloses the computer system of claim 15 wherein the first destination node and the second destination node are different nodes.

(Column 6 Lines 25)

With respect to Claim 28, Iwata discloses the computer system of claim 15 wherein the first destination node and the second destination node are the same node.

(Column 6 Lines 25)

With respect to Claim 29, Iwata discloses a computer system for reconfiguring a path between a source node and a destination node, (Figures 1-4, Figure 6-10, Column 7 Lines 1-35, Column 8 Lines 1-15) comprising: means for establishing a first path between the source node and the destination node, the path having a virtual address; (Column 1 Lines 45-65) and means for establishing a second path between the source node and the destination node (Column 6 Lines 50-55, Column 8 Lines 50-65) so that data transmitted using the virtual address is routed via the first path before the second path is established and via the second path after the second path is established, and (Column 9 Lines 1-5, Lines 40-65, Column 10 Lines 30-40) means for storing the virtual address and data in a frame that includes a header and a payload. (Iwata- Column 7 Lines 20-35)

With respect to Claim 30, Iwata discloses the computer system of claim 29 including: means for providing the virtual address to the source node for use in

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transmitting data to the destination node. (Column 6 Lines 45-55)

With respect to Claim 31, Iwata discloses the computer system of claim 29 wherein the establishing of the second path is performed transparently to the source node. (Column 6 Lines 55-65, Column 9 Lines 1-5, Lines 40-65, Column 12 Lines 35-45)

With respect to Claim 32, Iwata discloses the computer system of claim 29 wherein the path is established through a network of switches. (Column 6 Lines 20-35)

With respect to Claim 33, Iwata discloses the computer system of claim 32 wherein the paths are established through switches with ports and wherein the means for establishing of a path includes identifying a source-side port and a destination-side port for each switch in the path. (Column 6 Lines 20-50, Column 8 Lines 1-15)

With respect to Claim 34, Iwata discloses the computer system of claim 33 wherein the virtual address is used by source-side ports to map the source-side port to the destination-side port of the switch. (Column 10 Lines 30-65)

With respect to Claim 35, Iwata discloses the computer system of claim 32 wherein the switches are interconnect fabric modules. (Column 1 Lines 45-55)

With respect to Claim 36, Iwata discloses the computer system of claim 29 including: means for identifying a virtual address for sending data from the source node to the destination node and means for providing the virtual address to the source node. (Column 6 Lines 50-55, Column 8 Lines 50-65)

With respect to Claim 37, Iwata discloses the computer system of claim 36 wherein the identified virtual address is not currently used by any source-side ports of switches of the path. (Column 6 Lines 55-65, Column 12 Lines 1-5)

With respect to Claim 38, Iwata discloses the computer system of claim 36 wherein each port of each switch has a virtual address table for mapping virtual addresses to another port of the switch. (Column 10 Lines 30-65)

With respect to Claim 39, Iwata discloses the computer system of claim 29 wherein the path comprises switches with ports and when data is received at a port of a switch, the virtual address of the data is used to retrieve an indication of another port and the data is sent out of the switch through the other port. (Column 10 Lines 30-65, Column 11 Lines 1-35)

With respect to Claim 40, Iwata discloses the computer system of claim 29 wherein the data is a Fibre Channel frame. (Column 1 Lines 1-25) The Examiner notes that the Fibre Channel protocol was designed to operate on ATM networks.

***Response to Arguments***

Applicant's arguments filed 06/21/2005 have been fully considered but they are not persuasive.

The rejections for Claims 18, 26, and 41 under USC 112 are withdrawn.

The Applicant presents the following argument(s) [*in italics*]:

*Iwata fails to disclose a method in which the "virtual address and data are stored in a frame that includes a header and a payload." Instead, Iwata simply fails to disclose a method for storing the virtual address and data.*

The Examiner respectfully disagrees with the Applicant. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "*virtual address and data are stored in a frame that includes a header and a payload*") are not recited in the rejected claim(s) as per the Office Action dated 03/21/2005. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Furthermore in Column 7 Lines 20-35 Iwata disclosed sending data packets with headers containing the virtual destination address, said virtual address being

stored in a route table. The data packets are differentiated from the signaling packets by the payload stored in the data packets. Thus Iwata disclosed having virtual address and data stored in a frame that includes a header and a payload, and means for storing the virtual address and data.

The Applicant presents the following argument(s) [*in italics*]:

*Iwata fails to disclose a method for "establishing a second path between the source node and the destination node so that when the source node transmits data using the provided virtual address the data is transmitted via the second path rather than via the first path."*

The Examiner respectfully disagrees with the Applicant. In Column 7 Lines 35-40 Iwata disclosed preassigned Virtual Path Identifiers (VPI) and Virtual Channel Identifiers (VCI), which are later mapped to other selected alternative routing information in order to establish a virtual connection route. Each VPI is an identifier given to a bundle of multiplexed Virtual Channels. The said virtual connection route is then used to send the data packets, said data packets containing the stored virtual address and the payload data. (Iwata – Column 7 Lines 20-35) In another embodiment, Iwata disclosed sending the data message immediately following the sending of the signaling packet, thereby disclosing that the data packet undergoes the same translation and mapping procedure that the signaling packet goes through. (Iwata – Column 5 Lines 45-55) Thus Iwata disclosed establishing a second path that is different from a first path.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Bengzon whose telephone number is (571) 272-3944. The examiner can normally be reached on Mon. thru Fri. 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571)272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

MARC D. THOMPSON  
**MARC THOMPSON**  
PRIMARY EXAMINER



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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